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Will low-cost airlines also disrupt long-haul services?

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Background

- In many parts of the world, LCC radically changed short- and medium-haul airline services
  - In 2016, LCC controlled a market share of 26% of the world's total scheduled services (= share of seat capacity)
  - Big regional difference in market penetration
    - Latin America: 57.2%
    - South East Asia: 52.6%
    - USA (domestic): 46%;
    - EU (domestic): 41%
    - Asia Pacific: 24%
    - Africa: 9%
    - East Asia: 8.4%
  - LCC's current growth rate is approximately double the growth rate of legacy carriers (global average)

Table 1: LCC compound annual growth rates by region (2007-2016)

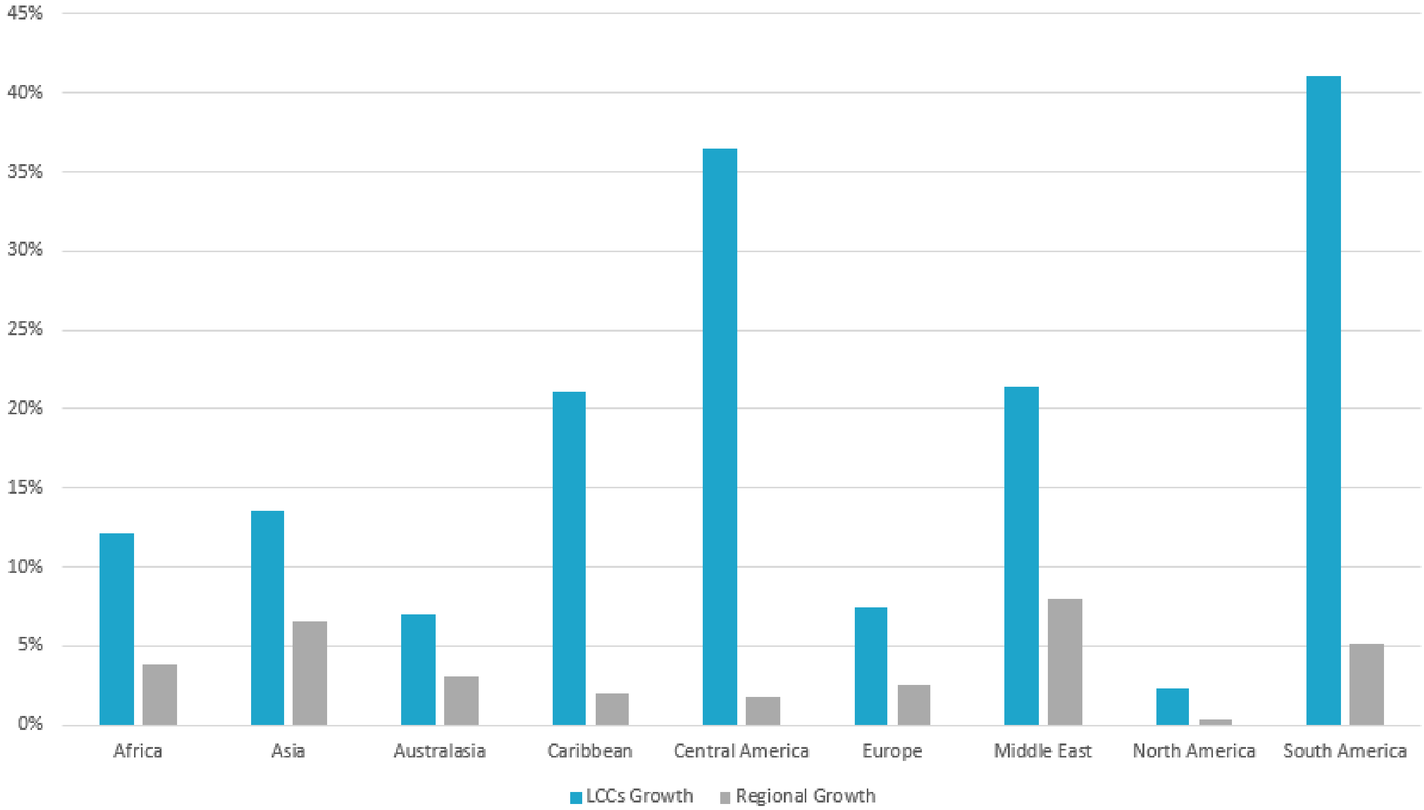

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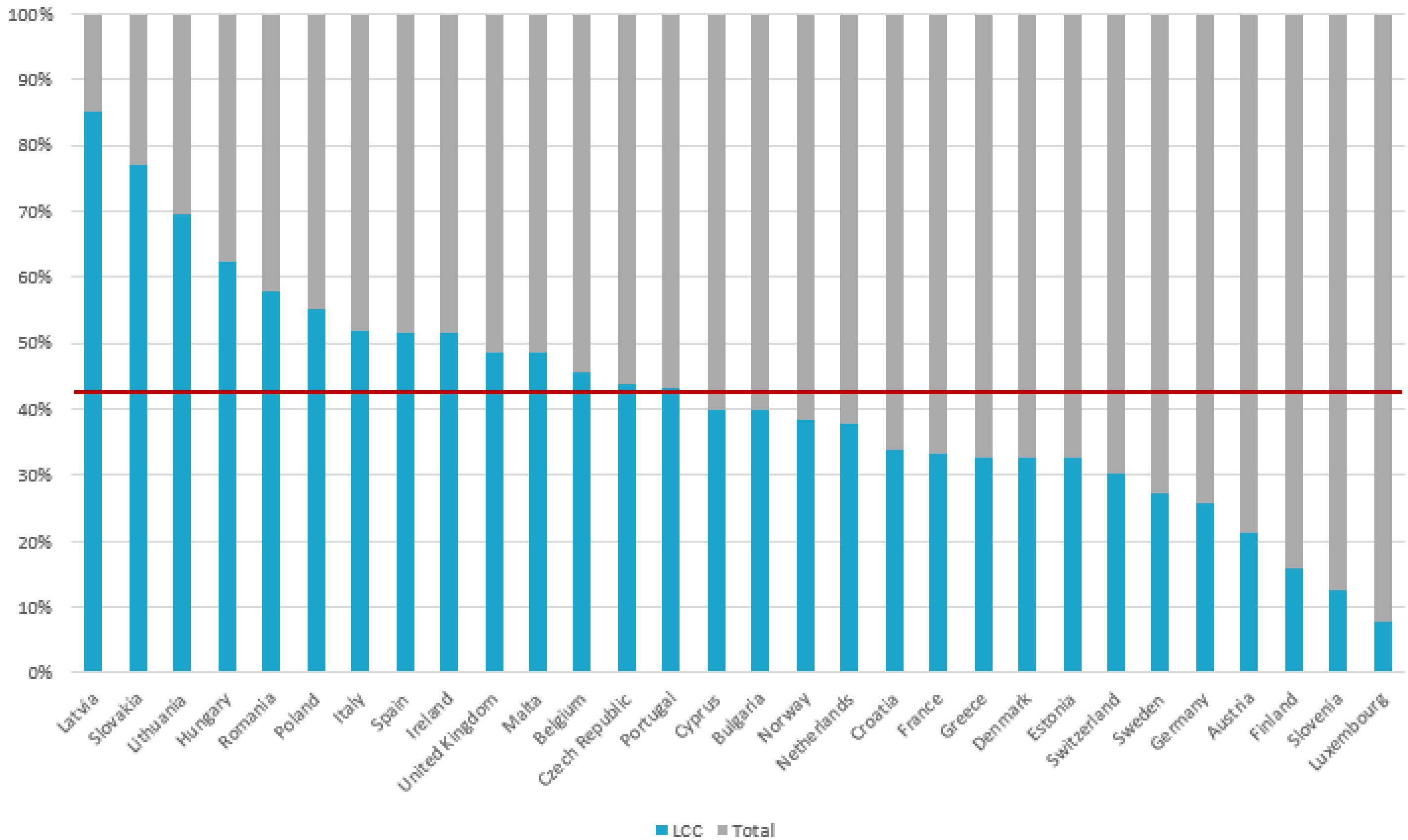
Table 2: LCC market shares in the EU's member states



Background

- Legacy carriers' reactions have varied (often in combination):
  - Retrenchment and focus on improving main hubs' long-haul connectivity (British Airways)
  - Predation (e.g. Lufthansa vs. Aero Lloyd (1988-1990 when Aero Lloyd ends all scheduled flights) Lufthansa vs. German Wings (1989-1990, German Wings filed for bankruptcy as a result); Lufthansa vs. Germania (2001-2002, Federal Cartels Office partly sanctions LH"s conduct)
  - Establishment of in-house LCC subsidiaries (e.g.; LH: Lufthansa Express, Germanwings/Eurowings; British Airways: Deutsche BA (sold in 2003 to Intro Verwaltungsgesellschaft) + GO Fly (sold to easyJet in 2002); IAG (= British Airways, Iberia, Aer Lingus): Vueling; Delta: Delta Express, Song; United: Ted; Qantas: Jetstar Airways; Singapore Airlines: Tiger Airways, Scoot); Air Canada: Zip + Air Canada Tango; Thai Airways: Nok Air: AF/KLM: Transavia + Joon)
  - Copying some LCC fare and service features (low "base fares" which do not include any "free" extras → unbundling to earn "ancillary revenues")

Background (cont'd)

- Is long-haul LCC flying the next big thing in the airline industry?
  - Long-distance LCC services were a very small niche before deregulation and in the early post-deregulation era
    - Scheduled service pioneers: Loftleiðir (since 1979: Icelandair) → Transatlantic hub & spoke operation via Reykjavik since 1952; Laker Airways ("Skytrain") → charter airline which offered scheduled nonstop services from London Gatwick to some US destinations from 1977 until its bankruptcy in 1982 (at its peak, it was the fifth largest Transatlantic airline by seat capacity!)
    - Charter services for package tour operators from Europe to the Carribean, Southeast Asia, East Africa and North America (e.g. by Condor (Germany), Britannia Airways (UK), Wardair, Air Transat, Canada 3000 (Canada), Martinair (NL) which were, after deregulation, also offered seat-only bookings
    - Emerging low(er) cost long-haul competition by Gulf carriers (ME3) and Turkish Airlines since the late 1980ies (pioneer: Emirates Airline)!
    - Sideshow: Transatlantic LCC business class-only operators: Eos Airlines (2004 till 2008 bankruptcy); MAXJet (2003 till 2007 bankruptcy); Silverjet (2006 till 2008 bankruptcy, La Compagnie (2013, still operating Paris-Newark with 2 aircraft)

Status quo summary

- Some three decades after domestic and international air traffic was gradually deregulated, starting in the USA and the EU, legacy ("network") carriers, especially in Europe, South Asia, South East Asia and Australia, are now exposed to up to three variants of intra-modal competitors:
  - LCC competition on their short-haul and medium-haul network
  - Massive low(er) cost long-haul competition by the ME3, Turkish Airlines and the Chinese carriers on many long-haul connecting services (especially Europe to/from Africa, South Asia, Southeast Asia and Australia/New Zealand
  - Increasing LCC long haul competition on select nonstop inter-continental routes (e.g. Europe to/from North America, South East Asia and Latin America)
- However, alliances of network carriers (Star Alliance, Skyteam, oneworld) often enjoy antitrust immunity in major long-haul markets which they continue to dominate

Status quo summary (cont‘d)

- Legacy carriers’ reactions to the competitve threat from LCC long-haul entry are very similar to theirs on short- to medium-haul markets, but were taken relatively earlier (and again often in combination):
    - Retrenchment + focus on most profitable medium- to long-haul hub connections (Malaysian, Qantas, Lufthansa)
    - Predation through price and capacity matching on select city pairs (IAG - British Airways, Iberia, Air Lingus - vs. Norwegian Air Shuttle, e.g. London Gatwick-Oakland)
    - Establishment of in-house LCC subsidiaries (e.g.; LH: Eurowings: IAG: Level; Qantas: Jetstar; Singapore Airlines: Scoot; Air Canada: Rouge, Air France: Joon (from mid-2018))
    - Copying some LCC fare and service features (low base fares which do not include “free” extras anymore, e.g. American Airlines and Aer Lingus on selected Transatlantic flights)

Research question

- Can the “classic” short- to medium-haul LCC business model be successfully applied to long-haul operations?
  - Literature review → seminal paper: Peter Morrell (2008), his principal findings are supported by most subsequent academic and consulting studies
    - Substantial skepticism as regards the feasibility of long-haul LCC business model apart from some niches (in particular low-yielding, low-frequency holiday destinations which have traditionally been served by package tour/charter operators)
    - Main argument: LCCs’ cost advantage substantially erodes on long-haul operations compared to short- and medium-haul services
    - Moreover, when that paper was written, some long-haul LCC services were cut due to the overall dire economic situation (oil price at ~120US$/barrel and beginning of global financial and economic crisis)
  - Our counterhypothesis: Rather large market potential on “short” long-haul services (due to next generation aircraft, also in combination with simplified hub & spoke operations

Outline of the analysis

- Basic features of the short-/medium haul LCC business model and its evolution over time
  - Increasing “hybridization”
- Are the LCC’s short-to medium haul cost advantages replicable on long-haul services?
  - Excursus: Segments of the long-haul market - “short and medium” long-haul services vs. “long and ultra-long” long-haul services
  - Nonstop vs. connecting long-haul services
  - Recent advances in aircraft technology
- Alternative long-haul LCC business models: an assessment of their respective commercial viability

Basic features of the traditional LCC business model

- Main sources of cost-savings and extra revenue generation of LCC vis-à-vis legacy (network) carriers
  - Single-type fleet of short- to medium haul aircraft (A320 or B737 families) reduces operational complexity, maintenance and crew training costs
  - Simple point-to-point services from/to bases instead of complex connection-centered network operations (although “self-connection option” remains available for LCC passengers at their own risk)
    - Higher daily aircraft utilization rates, less prone to systemic delays
    - Crews return home after duty (no hotel costs)
  - Secondary airports instead of main airports
    - Lower fees and charges, more widely available marketing incentives and faster aircraft turnaround times
  - Younger and often non-/less unionized staff
    - Lower pay scale (cabin crew, administrative staff) and/or higher productivity compared to legacy carriers (pilots → legal flight time limits fully exhausted)

Basic features of the traditional LCC business model (cont‘d)

- Main sources of cost-savings and extra revenue generation of LCC vis-à-vis legacy (network) carriers (cont’d)
  - Substantially less organizational slack/administrative costs
  - Online-based direct distribution vs. use of global distribution systems (Amadeus, Sabre etc.)
    - No commissions for intermediaries
    - Extremely flexible pricing (as opposed to the rather rigid system of price points used by legacies)
  - Tickets included basic transportation only, all extras offered on top must be booked and paid for → unbundled fares, ancillary services generate ancillary services
    - E.g. baggage (checked and, in part, carry-on), priority boarding, advance seat reservation, meals and beverages, lounge access, in-flight sales (duty-free, lottery tickets etc.)

Increasing hybridization

- LCC have strongly expanded into main airports (including hub airports of legacies, e.g. Madrid, Frankfurt/Main, Athens, Atlanta)
- Some LCC offer enhanced service bundles (at higher ticket prices) for business travelers (typically include advance seat assignment, priority boarding, flexible rebooking option and some “free” baggage allowance)
- Some LCC offer scheduled connecting services → basic hub-and-spoke operations have emerged
- Legacies have cut commissions and strongly improved online presence
- Legacies have introduced unbundled and simplified fares
- Legacies have set up in-house LCC platforms (see above for examples) to replicate some of the original cost advantages of LCC
- To sum up: Most LCC and legacies offer a hybrid service model now although substantial cost advantages remain for the most efficient LCC

Table 3: Unit cost comparison - Ryanair, Lufthansa, Eurowings

Eurowings' and airberlin's ex-fuel cost bases still ~2.5x higher than Ryanairs'

	Lufthansa	Germanwings ('20% lower')	Eurowings (20% lower than GW)	airberlin	Ryanair
Average Costs:					
CASK (cents)	10.5	8.4	6.7	7.4	3.69
Ex-fuel CASK (cents)	8.2	6.5	5.4	5.65	2.12
Premium to Ryanair:					
CASK (cents)	185%	128%	82%	101%	
Ex-fuel CASK (cents)	287%	207%	155%	167%	

Are the LCC‘s cost advantages replicable on long-haul services?

- Excursus: Segments of the long-haul market – supply-side considerations
  - No precise market definition exists
  - Travel time and flight distance are typical proxies
    - “Short to medium” long-haul services: 6-8 hours (nonstop), up to 7,000km (e.g. Western Europe to East Coast USA/Canada, Japan/Australia/New Zealand to Hawaii, Europe to East/West Africa, Moscow to Russian Far East)
    - “Regular” long-haul services: up to 12 hours (nonstop), 10,000km (e.g. Europe to West Coast USA/Canada, Australia/New Zealand/East Asia to West Coast USA/ Canada, Europe to East and South East Asia, Europe to South Africa, Europe to Central and North East of Latin America)
    - “Ultra long-haul” services: up to 18 hours (nonstop), 14,000km (e.g. Gulf to Australia/New Zealand, Gulf to USA/Canada West Coast, Singapore to New York/Los Angeles, West Australia to London, East Australia to London/New York (“considered” by Qantas)

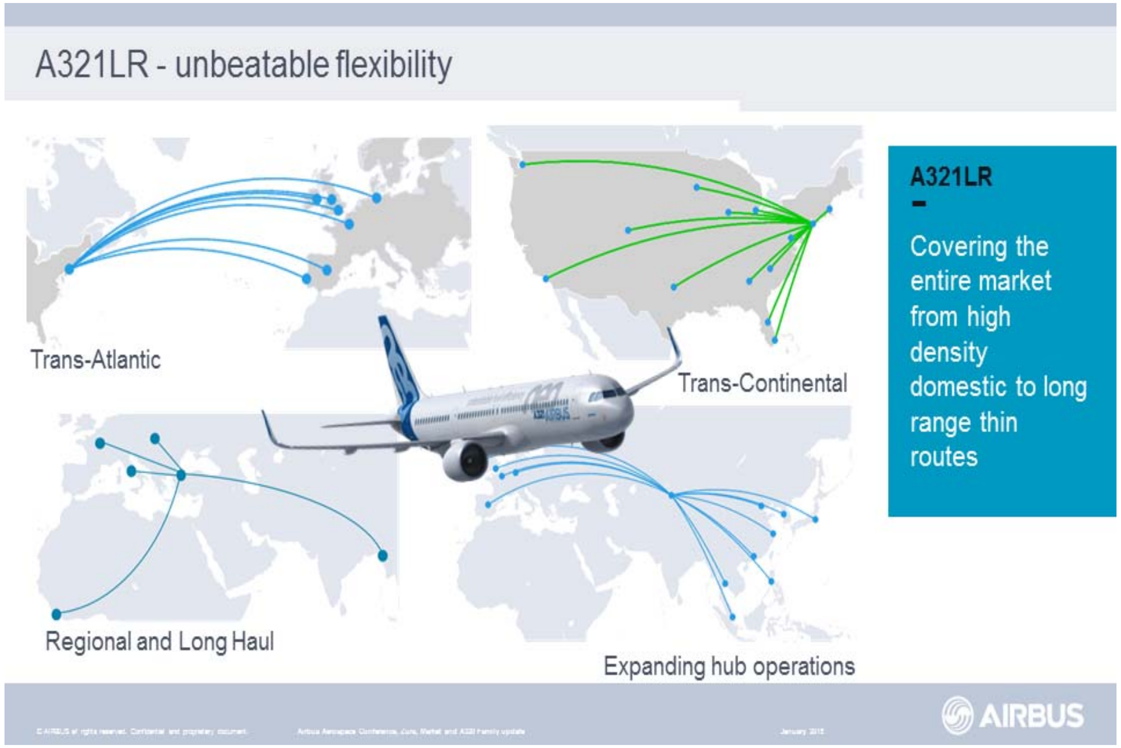
Are the LCC‘s cost advantages replicable on long-haul services? (cont‘d)

- Nonstop services vs. connecting services
  - Gulf carriers, Icelandair, WOW: Predominantly 1 stop itineraries from all origins to all destinations via their respective hubs (except for OD traffic to/from the Gulf/Iceland)
  - Three large alliances: Interconnection of alliance members networks around their respective hub airports (i.e. spoke → hub ↔ hub → spoke with typically
    2 stop connections for all traffic, except for OD traffic to/from their respective hubs which is either nonstop or 1 stop)
  - All other LCC operating long-haul services (e.g. Air Asia X, Norwegian, Cebu Pacific): Local and regional feeder services from own short-to medium-haul LCC operations in source region (e.g. Kuala Lumpur, Manila, London Gatwick, Barcelona) → own feed or in cooperation with other local LCC
  - Emerging hybridization: Ryanair feeder service for Air Europa’s long-haul services from Spain (Barcelona) to Latin America

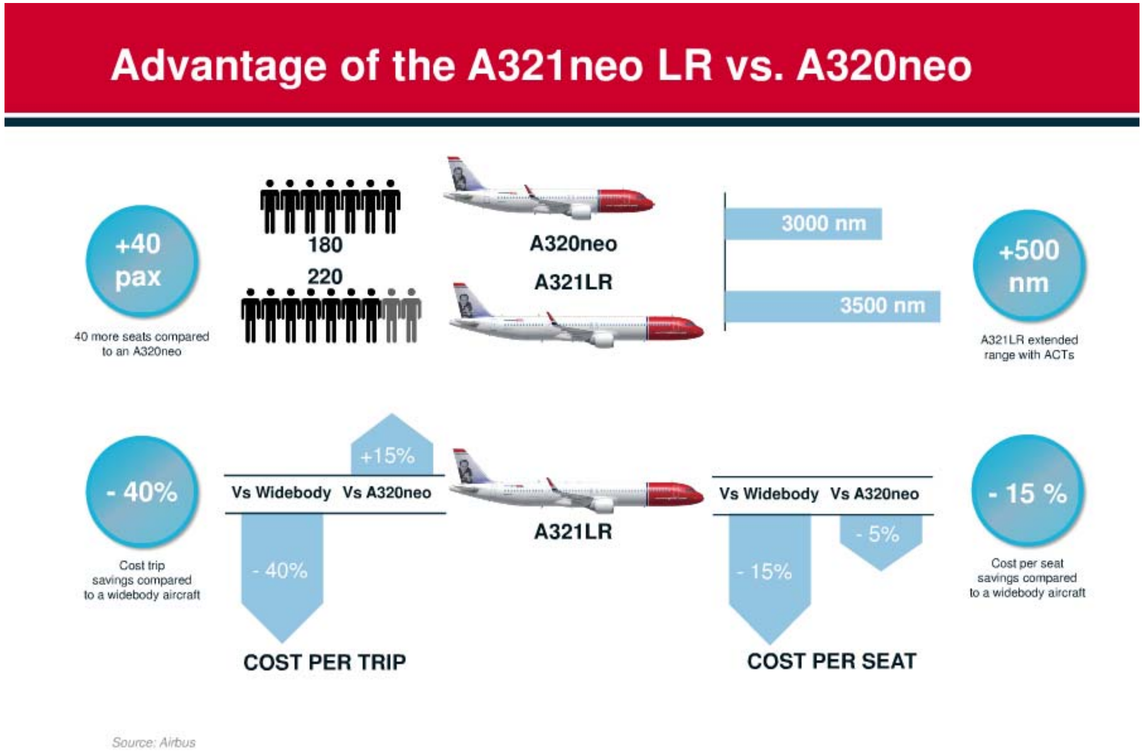
Are the LCC's cost advantages replicable on long-haul services? (cont'd)

- Enablers of LCC long haul services:
  - Currently favourable macroeconomic environment (low oil prices, low interest rates)
  - Substantial aircraft and engine technology improvements
    - Extended range of latest generation of narrobody A320 and B737 families
      - New: Transatlantic range (East Cost USA/Canada ↔ Northwestern Europe)
      - Substantial cost savings per seat vis-à-vis widebodies
      - May be used for new point-to-point service to/from secondary airports (e.g. Stewart Int'l Airport/ New Jersey to Edinburgh, Belfast… on Norwegian)
    - Same for latest generation of widebody aircraft (B787 family, A330neo family, A350 family) offer substantial cost savings per ASK at extended range
      - Range up to 13,000km (e.g. Europe ↔ North and Latin America, Europe ↔ South East Asia, South-East Asia ↔ West Coast USA/Canada)

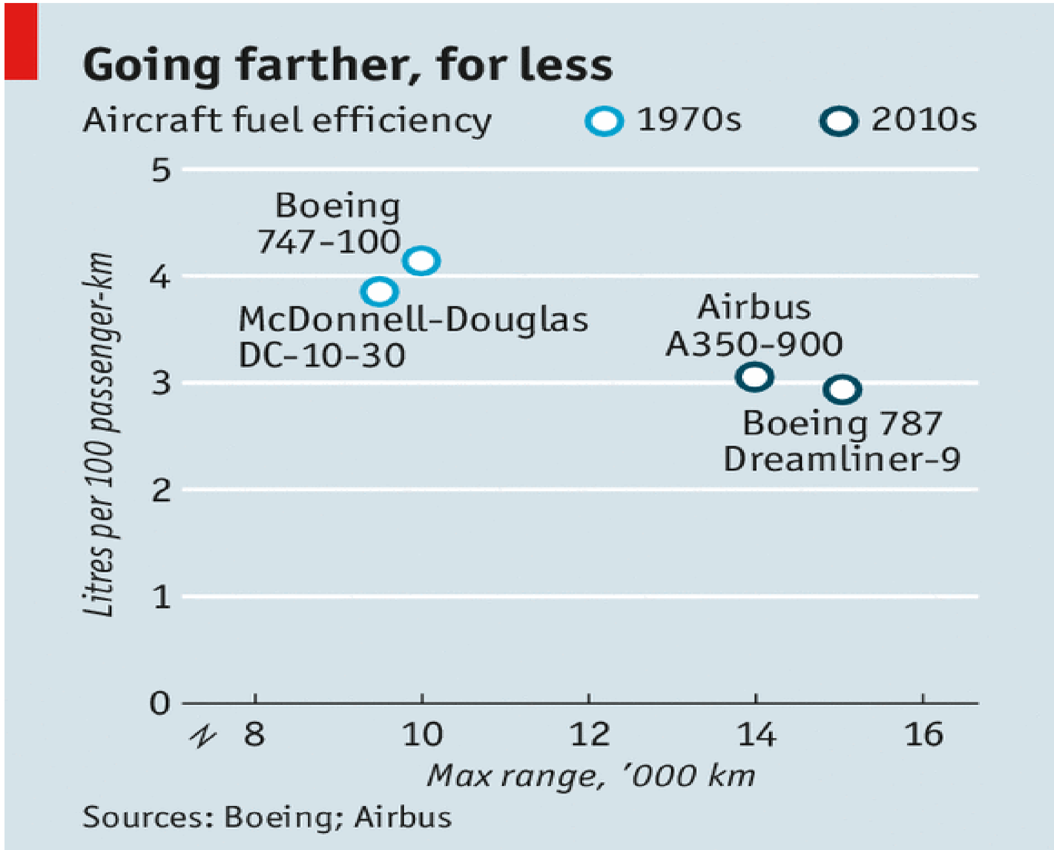
Are the LCC's cost advantages replicable on long-haul services? (cont'd)



Are the LCC's cost advantages replicable on long-haul services? (cont'd)



Are the LCC‘s cost advantages replicable on long-haul services? (cont‘d)



Are the LCC‘s cost advantages replicable on long-haul services? (cont‘d)

- But: Cost advantages of LCC are generally lower on long-haul services than on short- and medium-haul operations
  - Overall much higher daily aircraft utilization on long-haul operations (12-16 hours per day excluding maintenance periods)
  - Minimum legal crew rest periods reduce pilot and cabin crew productivity and align it more closely to legacy carriers’ standards
  - Additional costs due to higher complexity of long-haul operations
    - In particular, if a mixed fleet without cockpit commonality must be deployed due to incompatible payload/range profiles of missions
    - Accommodation at destination is required for crews during rest periods
    - Aircraft capacity can barely be increased as high-density economy class seating is common
    - Increased product differentiation might be necessary to offset seasonality of VFR and tourist travel: Two-class configuration (business class/premium economy)
    - Many long-haul services also rely on cargo for their commercial viability

Are the LCC‘s cost advantages replicable on long-haul services? (cont‘d)

- Demand side limitations:
  - Short-to medium-haul flights remain substantially cheaper
  - Short- and medium haul flights are less complicated to organize
    - Much shorter overall duration of trips (flight time + period of stay at destination)
    - Visa issues are generally less relevant
    - Short-time leave from workplace
  - Therefore, “spontaneous” weekend or short business trips are much more common on short- and medium-haul than on long-haul
  - To sum up: Substantially lower overall demand for long-haul services

Table 4: Cost per ASK, European airlines

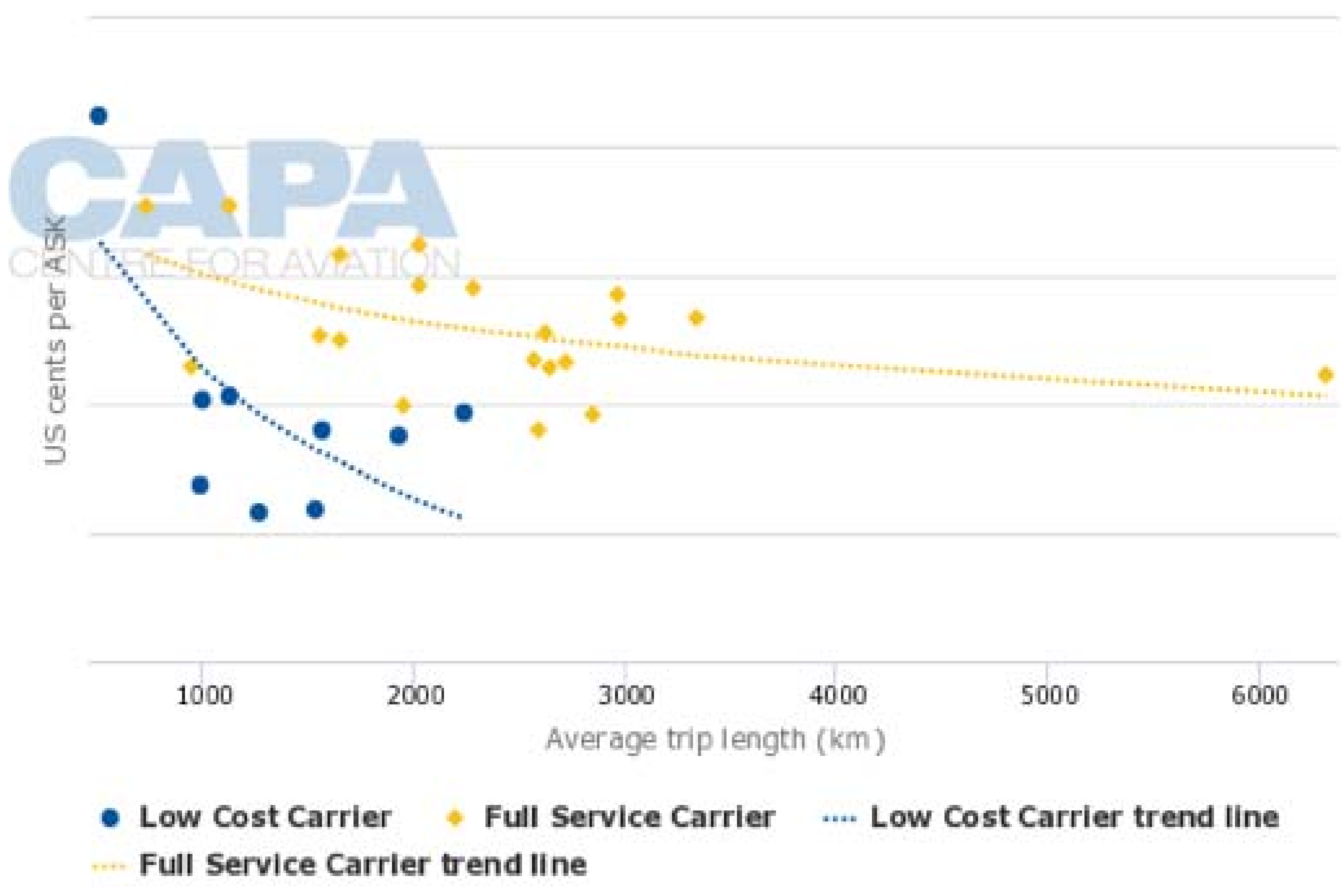


Table 5: Cost per ASK, Asia Pacific and Middle East Carriers

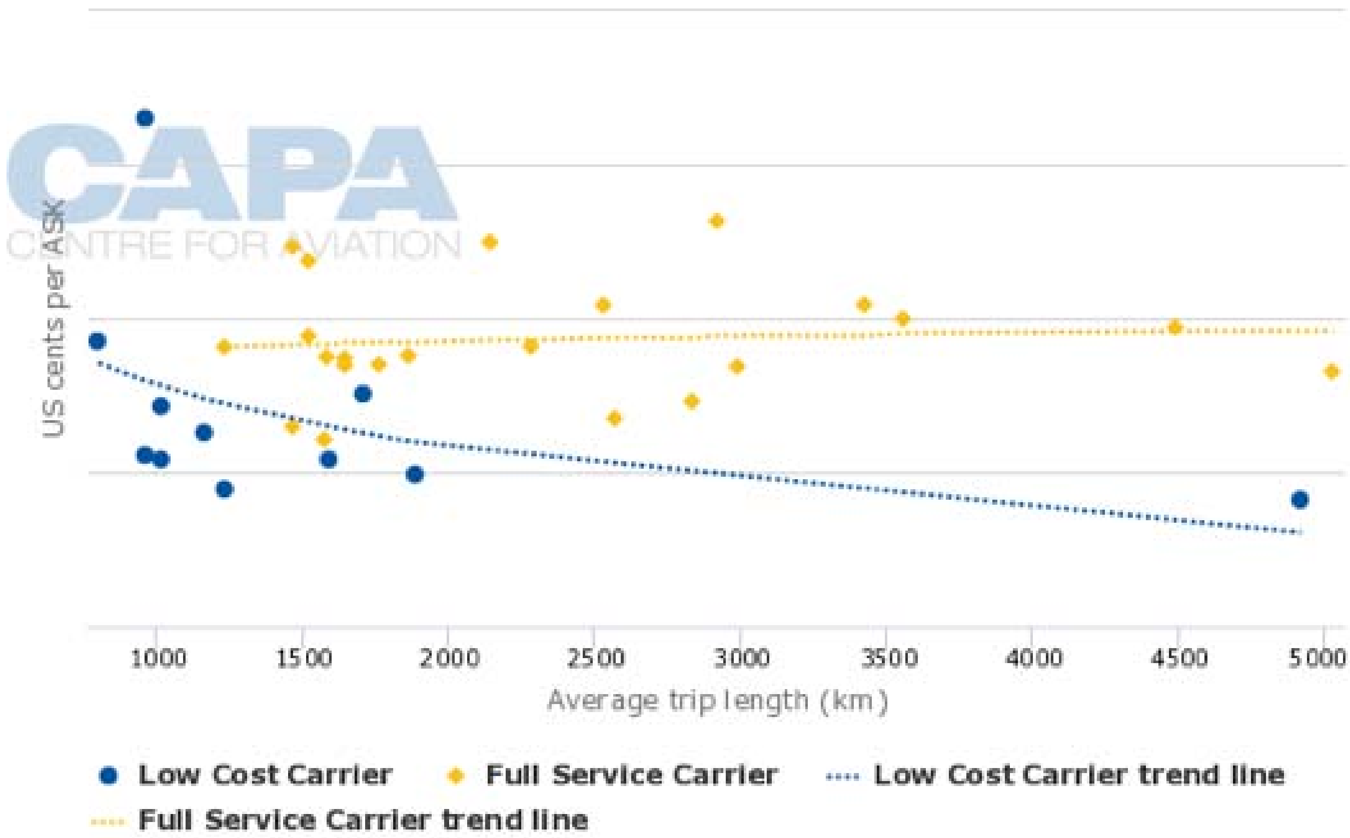
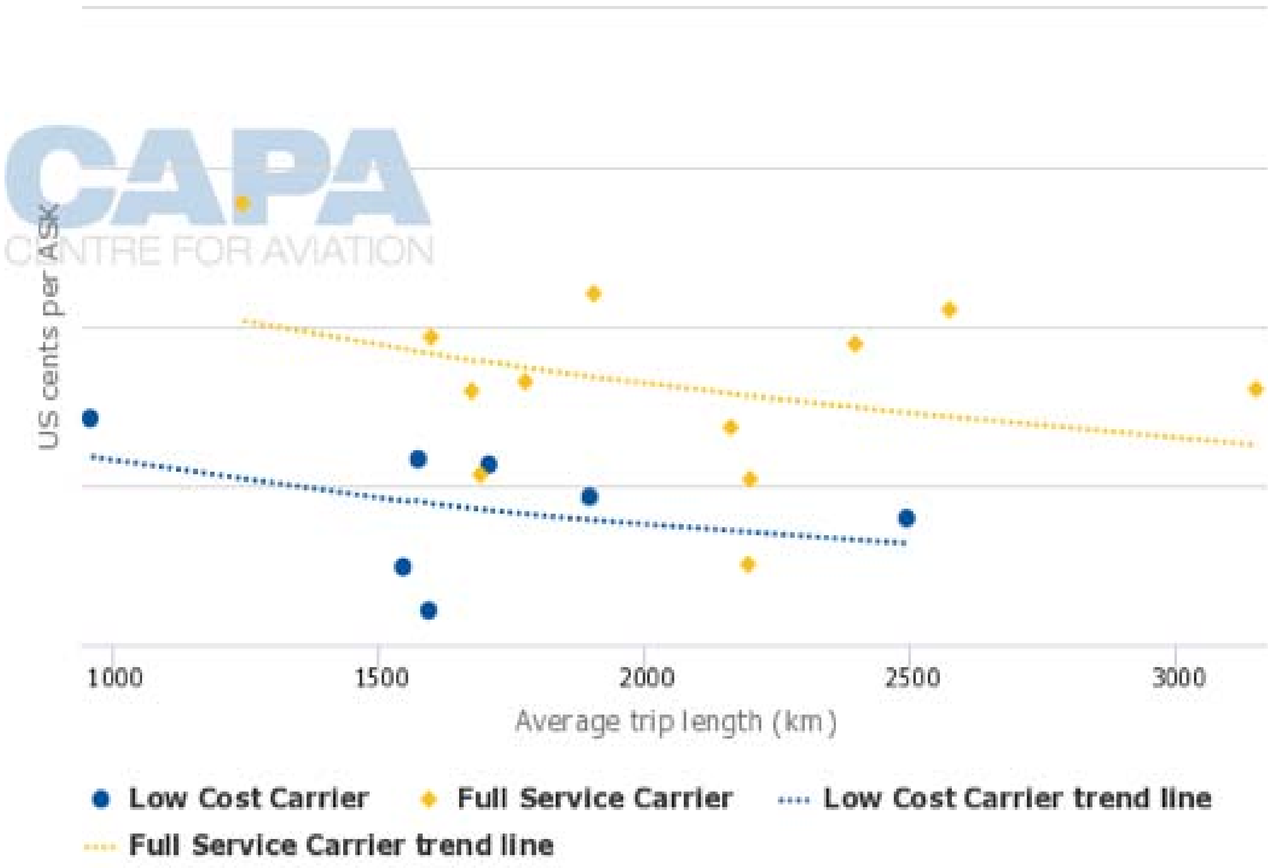


Table 6: Cost per ASK, North and Latin American airlines



Conclusions and Outlook

- Long-haul LCC operations are no new phenomenon…
- … but likely to remain a niche
  - LCC cost advantages for long-haul operations are substantially lower
  - Legacy carriers are much better positioned today to counteract LCC market entry
    - Chapter 11 reorganizations (USA), multi-platform approach (Europe), product alignments have improved competitiveness of legacies vis-à-vis
  - Core demand is inherently lower for long-haul services
- Commercial viability of LCC is potentially largest on “short” long-haul services
  - Select Transatlantic services (nonstop or via hubs) → Icelandair and WOW are best positioned with their business model
  - Select Asia Pacific services (nonstop of via hubs) → Scoot, Air Asia X and Jetstar
- Sustainability of “long” and “ultra-long” long-haul services hinges crucially on macroeconomic conditions and legacies’ (anti)competitive reactions (→ Norwegian: highly leveraged operation, negative cash flow, massive counter-attacks by IAG carriers BA, Aer Lingus, Level)

Thank you very much for your attention!

Questions and comments welcome!

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